

WE CLAIM:

- 5 1. A swing boom assembly, comprising:
- (a) a fixed base;
 - (b) a pivot base rotatably mounted on said fixed base;
 - 10 (c) a boom pivotally coupled to said pivot base proximate a lower end thereof and having a hydraulic piston cylinder coupled between said boom and an upper end of said pivot base and
 - 15 operative to raise and lower said boom;
- wherein said pivot base has
- (i) an upper shaft;
 - 20 (ii) a main body having a pair of spaced apart clevis plates affixed to each end of said upper shaft;
 - 25 (iii) a spherical bearing rigidly mounted around said upper shaft between said clevis plates

and said bearing having an outer race rigidly mounted to said fixed base.

5 2. An assembly according to claim 1, wherein said hydraulic piston cylinder is pivotally coupled to said pivot base at a level intermediate said clevis plates

3. An assembly according to claim 1, wherein a line of
10 action through said hydraulic piston cylinder passes through said spherical bearing when said hydraulic piston cylinder is near or at a horizontal position.

4. An assembly according to claim 1, including a lower
15 pivot shaft rigidly coupled to said main body and a lower spherical bearing coupled to said lower pivot shaft and having an outer race rigidly coupled to said main body.

5. An assembly according to claim 1, wherein said fixed
20 base is part of a skidder.

6. An assembly according to claim 4, including a swivel actuator mounted on said fixed base and coupled to said lower pivot shaft, operative to rotate said pivot base.

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7. An assembly according to claim 1, wherein said clevis plates are integral with said main body.